

## **ABSTRACT**

Current technological conditions that have grown rapidly caused a lot of work system that has been heavily done manually. No doubt it can replace humans in doing some work, including in communicating to get information about a thing or so-called question and answer activities. This question and answer system is very necessary especially in place of public facilities which in this study the author take the example of campus. In the search for information was a problem when looking for information or ask but not appropriate keywords that are asked so that sometimes the intent of the question or keyword slightly inappropriate.

Based on the above problem the author designed a question answering system by predictive annotation (question and answer system with predictive annotation). The system will be designed based on natural language processing (natural language processing). Where this system can perform natural language processing process so as to facilitate communication between human and computer. This research will apply natural language processing to a question answering system with predictive annotations applied to speech-to-speech systems. So the user just need to say the sentence in accordance with questions around the campus. Predictive annotations can also predict question intentions using answer selection and hit list ranking viewing of incomplete or slightly inappropriate keywords, predicting similar questions and suggesting questions when keywords are not appropriate.

The results obtained by using predictive annotations that seek answers based on keyword questions, subject and object can get answers as well as can provide suggestions of similar questions and provide advice to answer questions and answers if questions are deemed ambiguous or ambiguous.

**Keyword** : Natural Language Processing (NLP), Predictive Annotation, Question Answering System, Speech-to-speech System